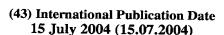
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(54) Title: USE OF SYNERGISTIC BACTERIOPHAGE LYTIC ENZYMES FOR PREVENTION AND TREATMENT OF BACTERIAL INFECTIONS

(57) Abstract: Methods for treating and preventing bacterial infections are described using at least two lytic enzymes obtained from a bacteriophage isolated from Streptococci. Two of these enzymes, Pal and Cpl-1, showed synergy when tested for cleavage of peptidoglycan in the cell walls of Streptococcus pneumoniae. Moreover, the combination of these two enzymes resulted in killing of both penicillin sensitive as well as penicillin resistant strains of S.pneumoniae. The synergy displayed by the combined use of these two enzymes may establish a means for identification of agents that mimic or enhance this activity and may lead to the identification of new antimicrobial agents and pharmaceutical compositions useful for treating and preventing a variety of bacterial infections in mammals. Further compositions are described for disinfecting or sanitizing porous and non-porous surfaces suspected of harboring infectious organisms.